

CLAIMS

1. A non-intrusive female urinary incontinence device (13) comprising a flexible elastic strip (1) having a flat upper face and a lower face, an opening (3) being provided in the strip communicating between the upper and lower faces, a fluid collection means surrounding (4) the opening in a fluid tight manner on the lower face of the strip and means (19) for attaching the device to a supporting means (13),  
  
wherein the strip and opening are sized and shaped such that when it is stretch fitted over the external urogenital organs the labia minora extends through the opening and a fluid tight fit between the upper face of the strip and the flesh surrounding the labia minora and around the base of the labia minora is formed,  
  
such that in use urine is conveyed from the urethra, through the labia minora, into the collection means without leakage.
2. A device according to claim 1 wherein the fluid collection device comprises a funnel portion the curved wall of which at an upper end extends circumferentially from the surface of the oval region around the opening and curves inwards to a lower open end (8) suitable for communicating with a collection vessel (34),
3. A device according to claim 2 wherein the anterior surface of the wall of said funnel curves more sharply than the posterior surface, such that the lower opening (8) at the base of the funnel lies in a lower plane than that of the opening (3) in the strip.

4. A device according to claim 1 wherein said funnel has a double-walled structure, the inner curved wall (5) narrowing symmetrically and more sharply than the outer wall so that an internal opening (9) is formed substantially parallel to and of smaller radius than the opening (3) in the strip.
5. A device according to claim 3 or claim 4 wherein a cavity (24) is formed between the posterior surface of the inner wall and the posterior surface of the outer wall such that, when the user is in a horizontal position, urine which has passed through the internal opening (9) of the funnel is prevented from flowing back into the cavity between said opening and the oval opening of the strip.
6. A device according to any of claims 3 to 5 wherein the inner wall (5) and outer wall (6) are spaced apart such that urine in the cavity (24) is prevented from flowing back into the interior opening (9).
7. A device according to any of claims 1 to 6 wherein the exterior wall (6) of the funnel is constructed of resilient flexible material and the interior wall (5) is constructed with substantially the same material as the strip.
8. A device according to any of claims 1 to 7 wherein the funnel is integral to the strip.
9. A device according to any of claims 1 to 8 wherein said strip comprises divergent elongated straps at the front and rear to provide anterior and posterior

support straps for attachment to a supporting waistband, so that in use the strip is stretched tightly over the external urogenital organs.

10. A device according to claim 9 wherein the length of said straps is adjustable with respect to the waistband to allow for differences in size and shape of the user.
11. A device according to any preceding claim in which the strip portion is maintained under tension in use.
12. A urinary incontinence device further comprising a waistband (13) and means (20) for attachment to the device of any of claims 1 to 11.
13. A urinary incontinence device according claim 12 wherein the attachment means is adjustable to maintain a positive tension on the device when in use.
14. A urinary incontinence device substantially as hereinbefore described with reference to the accompanying drawings.